

SUMMARY FOR FE-09-02
SELECTED AND POSSIBLE CONTRIBUTING FACTORS

SELECTED FACTORS

Railroad: Norfolk Southern Corporation

Location: Claymont, Delaware

Region: 2

Month: March

Date: March 21, 2002

Time: 12:26 a.m., EST

Data for Fatally Injured Employee(s)

Locomotive Engineer

35 years old

13 years of service

Last rules training: Jan. 12, 2002

Last safety training: Feb. 26, 2002

Last physical: No record

Data for All Employees (Craft, Position, Activity)

Craft: Transportation and Engine

Positions:

Train No. H54

Locomotive Engineer

Conductor

Train Master

Amtrak Train No. 198

Engineer

Amtrak CETEC 4 Dispatcher

Activity: Boarding a standing locomotive after crossing an adjacent main line track

EVENT

The Locomotive Engineer was fatally injured when struck by a passenger train while trying to board a locomotive on an adjacent track.

SUMMARY FOR FE-09-02 CONTINUED

POSSIBLE CONTRIBUTING FACTORS

PCF No. 1

The Locomotive Engineer complied with the railroad's operating rules when crossing the main line track, first looking both ways. However, as he was boarding the locomotive on the adjacent track, he had no time to react to the approaching passenger train, whose actual speed was not noted in the report, but whose maximum authorized speed was 110 mph.

PCF No. 2

Poor visibility, which contributed to the fatality, occurred because this section of track was located in an unlighted area. In addition, the curvature of the adjacent tracks away from one another prevented the Amtrak Engineer from noticing the Locomotive Engineer boarding the freight locomotive on the adjacent track until it was too late.

PCF No. 3

The Locomotive Engineer was too close to the adjacent track while climbing the ladder on the standing locomotive.

REPORT: FE-09-2002

RAILROAD: Norfolk Southern Corporation (NS)

LOCATION: Claymont, Delaware

DATE & TIME: March 21, 2002; 12:26 a.m., EST

EVENT¹: The Locomotive Engineer was fatally injured when struck by a passenger train while trying to board a locomotive on an adjacent track.

EMPLOYEE:

Craft:	Transportation and Engine (T&E)
Activity:	Boarding Locomotive
Occupation:	Locomotive Engineer
Age:	35 years
Length of Service:	13 years
Last Rules Training:	Jan. 12, 2002
Last Safety Training:	Feb. 26, 2002
Last Physical:	No Record

CIRCUMSTANCES PRIOR TO THE ACCIDENT

On March 21, 2002, an NS Locomotive Engineer was fatally injured at 12:26 a.m. near Claymont, Delaware. The Engineer and Conductor on Train H54 reported for duty at Edgemore Yard, Delaware at 10 p.m. on March 20, 2002. Normally, this crew boarded its locomotive and train in the yard. On this evening, instructions were given to a yard crew to make up Train H54 and push it onto Amtrak's main track numbered 2F near Holly on the Northeast Corridor which is about four miles from Edgemore Yard. This change was due to Amtrak having put Track No. 2 out of service from Landlith to Wine. The train was made up with a locomotive on the north and south end in order to facilitate a push-pull operation.

Train H54 was placed on Track No. 2F at milepost 21.7 at about 10:34 p.m. on March 20, 2002. When the H54 crew members came on duty, they had the choice of waiting in the yard office or

¹"Event" is defined as "occurrence that immediately precedes and directly results in the fatality." Possible contributing factors are identified in the following report and attached summary.

actually going to their train to wait there. The Conductor and Engineer agreed to go to the train and wait because there was a chance they would receive clearance before 4 a.m.

The accident occurred on Amtrak's Northeast Corridor, Mid Atlantic Region, at milepost 21.6 on Track No. 2F. This unlighted area was adjacent to Interstate 495. There were four main tracks in this area. Amtrak operated 95 passenger trains per day, and SEPTA operated 65 commuter trains per day. NS operated two local trains and two freight trains daily plus three coal trains per week. The maximum authorized speed for passenger trains on Tracks Nos. 2 and 3 was 110 mph, and on Tracks Nos. 1F and 2F, authorized speed was 60 mph. Freight trains were limited to 30 mph on all four tracks. Tracks Nos. 2 and 3 were equipped with concrete cross ties and Tracks Nos. 1F and 2F with standard wooden cross ties.

THE ACCIDENT

At 12:10 a.m. on March 21, 2002, the Train Master departed Edgemore Yard and drove the Engineer and Conductor to the train via highway vehicle, arriving at Track No. 2F at 12:22 a.m. Before exiting the vehicle to board the locomotive, the Engineer discussed with the Conductor the work which was about to be performed.

The Engineer secured two items from the rear of the vehicle, a personal cooler and a satchel type grip. The Train Master noticed that as he walked eastward towards locomotive NS 5393, the Engineer stopped short of Track No. 3 and looked both ways, then proceeded to the lead steps of the locomotive.

At this time, the Train Master drove the Conductor northward to the rear of the train. Upon arrival at the north end of the train, Amtrak Train No. 198 passed by northbound on Track No. 3. Immediately, the Amtrak Engineer reported to the Amtrak CETEC 4 Dispatcher that something was struck as it passed the head end of the standing freight train on Track No. 2F.

The Train Master and Conductor, upon hearing this emergency transmission, immediately returned southbound to the head end of the freight train. As they approached the lead locomotive, they found the Engineer on the ground next to the engine. The Train Master, who was certified in CPR, tried to resuscitate the Engineer, unsuccessfully.

POST-ACCIDENT INVESTIGATION

An inspection of the accident scene revealed the center of Track No. 3 was about 12 feet, 4 ½ inches from the center of Track No. 2F at the location of impact. As the Engineer crossed Track No. 3 to board the locomotive, witnesses claimed the Engineer looked both ways prior to crossing the live track. As the Engineer boarded the locomotive, he placed his personal belongings on the step of the locomotive to maintain a proper grip while ascending the ladder.

The freight locomotive was facing southbound at the beginning of a left hand curve which veered away from Track No. 3. The passenger train was traveling northbound on Track No. 3 and rounded a left hand curve, (facing south), which is further south of the freight locomotive.

The Amtrak Engineer had only a few seconds to notice the freight locomotive sitting on adjacent Track No. 2F. The deceased, apparently, had no time to react to the approaching passenger train.

APPLICABLE RULES

According to the Train Master and Conductor, the deceased looked in both directions prior to crossing Track No. 3, as required by the following railroad safety rule:

GR 32 (2) Employee must maintain a vigilant lookout for and detect the approach of a train, locomotive, or other railroad equipment moving in either direction.